

REMARKS

In the Official Action mailed on **22 May 2006**, the Examiner reviewed claims 1-4, 6-16, and 18-25. Claims 1-4, 6-16, and 18-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moss et al (*Transactional Memory: Architectural Support for Lock-Free Data Structures*, hereinafter “Moss”), in view of Oplinger et al (*Enhancing Software Reliability with Speculative Threads*, hereinafter “Oplinger”).

Rejections under 35 U.S.C. §103(a)

Independent claims 1, 13, and 25 were rejected as being unpatentable over Moss in view of Oplinger. Applicant respectfully points out that Moss teaches a **series of instructions** that can be combined to create read-modify-write operations (see Moss, Section 2.1), and Oplinger teaches a **software system** using *try-catch* blocks to implement transaction execution (see Oplinger, Section 3, particularly Section 3.2).

In contrast, the present invention uses a **hardware-implemented start transactional execution instruction** to start transactional execution of a section of code (see FIG. 3 and paragraphs [0059] and [0061] of the instant application). This is beneficial because it provides direct hardware support at the processor for performing transactional execution, which greatly enhances the speed of execution by not requiring locks for critical sections of code. There is nothing within Moss or Oplinger, either separately or in concert, which suggests using a hardware-implemented start transactional execution instruction to start transactional execution of a section of code.

Accordingly, Applicant has amended independent claims 1, 13, and 25 to clarify that the present invention uses a hardware-implemented start transactional execution instruction to start transactional execution of a section of code. These


amendments find support in FIG. 3 and in paragraphs [0059] and [0061] of the instant application.

Hence, Applicant respectfully submits that independent claims 1, 13, and 25 as presently amended are in condition for allowance. Applicant also submits that claims 2-4 and 6-12, which depend upon claim 1, and claims 14-16 and 18-24, which depend upon claim 13, are in condition for allowance for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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